

## ARCTIC OCEAN

## BEAUFORT SEA

ALASKA

RESIDUAL MAGNETIC ANOMALY AND FREE-AIR GRAVITY ANOMALY  
PROFILES, 1973, ON CONTINENTAL SHELF AND SLOPE BETWEEN BERING  
STRAIT AND BARROW, ALASKA, AND MACKENZIE BAY, CANADA

BY  
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Plate 1. Location map of geophysical profiles in the Beaufort Sea region obtained by the U.S. Geological Survey from the U.S. Coast Guard Cutter BURTON ISLAND, August 20 to September 7, 1973. Position of profile track lines determined by navigation satellite. Hourly positions along track lines are indicated by ticks; half-hourly positions by dots. Hourly positions are numbered every six hours (00, 06, 12, 18) to facilitate correlation between track lines and geophysical profiles. Track lines are dashed where their locations are not well controlled by navigation satellite.

Each profile track line is identified by its end points (e.g. 323-324).

Northernmost limits of (and irregularities in) track lines determined by position of the Arctic ice pack.

Index map is keyed to marine seismic survey (Grantz, Arthur, McHendrie, A.G., Nilsen, T.H., and Yorath, C.J., 1974, Seismic reflection profiles on the continental shelf and slope between Bering Strait and Barrow, Alaska, and Mackenzie Bay, Canada: U.S. Geological Survey open-file report, 49 sheets seismic reflection profiles, 2 index maps, scale 1:1,000,000).

APPROXIMATE SCALE  
1:1,000,000

STATUTE MILES  
100  
KILOMETERS  
160

ARCTIC NATIONAL WILDLIFE RANGE

CANADA  
UNITED STATES

US Geological Survey Open File Map  
Map released without editorial and technical review for conformaty to  
US Geological Survey standards  
1974

This report is the fifth of a series of open-file reports presenting magnetic and gravity data of the Chukchi and Beaufort Seas obtained in marine seismic surveys headed by Arthur Grantz, chief scientist. The other reports are: (1) Grantz, Arthur, Hanna, W.F., and Wolf, S.C., 1970, Chukchi Sea seismic reflection and magnetic profiles, 1969, between northern Alaska and international date line: U.S. Geol. Survey open-file report, 1 sheet magnetic profiles, 25 sheets seismic profiles. (2) Grantz, Arthur, Hanna, W.F., and Wallace, S.L., 1971, Chukchi Sea seismic reflection profiles and magnetic data, 1970, between northern Alaska and Herald Island: U.S. Geol. Survey open-file report, 32 sheets seismic profiles, 2 sheets magnetic data, 1 location map. (3) Grantz, Arthur, Hanna, W.F., and Wallace, S.L., 1972, Chukchi Sea seismic reflection and magnetic profiles, 1971, between northern Alaska and Herald Island: U.S. Geol. Survey open-file report, 38 sheets seismic profiles, 2 sheets magnetic profiles, 2 location maps and index map. (4) Cady, John, Ruppell, B.D., McHendrie, A.G., and Deas, H.G., 1972, Magnetic and gravity profiles, Part 2 of Grantz, Arthur, Hanna, W.F., and Wallace, S.L., Seismic, magnetic, and gravity profiles - Chukchi Sea and adjacent Arctic Ocean, 1972: U.S. Geol. Survey open-file report, 19 sheets seismic reflection profiles, 2 maps.